

ABSTRACT OF THE DISCLOSURE

A high-efficiency liquid fuel cell is disclosed, which comprises, as an assembly, a negative or hydrogen electrode made from a hydrogen absorbing alloy such as $\text{LaNi}_{4.7}\text{Al}_{0.3}$ preferably fluorinated on the surface, an aqueous alkaline electrolyte solution in contact with the hydrogen electrode, which contains, as a hydrogen source material, a metal-hydrogen complex compound such as KBH_4 and LiAlH_4 dissolved in an aqueous alkaline solution, a positive or oxygen electrode, an oxygen source in contact with the oxygen electrode and a permeable membrane partitioning the space between the electrodes. The oxygen source in contact with the oxygen electrode can be either an oxidizing gas such as oxygen and air or an aqueous solution of a water-soluble oxidizing compound such as hydrogen peroxide.

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